Votes for Assets:

Mafia, Elections and Misallocation of Confiscated Assets

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Abstract

Organized crime groups, such as the mafia, are known to provide electoral support to politicians, but the rewards they obtain in exchange remain poorly understood. We develop a theoretical framework suggesting that modern mafia support hinges on political parties' willingness to weaken anti-mafia policies, rather than the level of electoral competition itself. Specifically, our model predicts that when electoral competition intensifies, political parties soften their anti-mafia platforms to secure mafia-controlled votes. Drawing on judicial records, we posit that the failure to allocate confiscated mafia assets for social purposes effectively enables the mafia to regain control of these properties, thereby acting as compensation for their electoral support. To test this hypothesis, we analyze data from Sicilian municipalities between 1992 and 2024. We find that increased electoral support for Forza Italia correlates with a significant decline in the allocation of confiscated mafia assets during periods when Berlusconi, the party's leader, was in power. To establish causality in vote buying, we use a Regression Discontinuity Design and show that municipalities narrowly won by Forza Italia experienced decreased assignment of these assets. In order to address the magnitude of vote buying, we use a proxy for historical vote-buying capacity by analyzing the sharp decline in support for the Christian Democrats following the mafia's decision to withdraw backing. Our findings indicate that in areas where the mafia's vote-shifting capacity was historically stronger, the decline in assets allocation during Berlusconi's governments was more pronounced, especially when electoral competition was higher, as the model predicts. Overall, we provide the first causal evidence of mafia vote buying, identify the concrete rewards the mafia obtained, and demonstrate that the magnitude of vote buying significantly influences the concessions they receive.

JEL codes: D72, D73, H11, K42, P16

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1 Introduction

Organized crime imposes substantial economic and social costs on democratic societies, ranging from lower GDP growth (Pinotti, 2015) to reduced institutional quality and social capital (Acemoglu et al., 2020; Alesina et al., 2019). One of the key mechanisms through which criminal organizations exert their influence is by engaging in electoral exchanges with political parties. Despite substantial evidence of electoral support from criminal organizations to political parties, the precise nature of the benefits they obtain in return remains poorly understood. This paper develops a theoretical and empirical framework to show that Mafia electoral support depends on political parties' willingness to weaken anti-Mafia policies once in power, with the extent of these concessions shaped by the level of electoral competition.

In this sense, the Sicilian Mafia (*Cosa Nostra* or *Mafia* hereafter) represents one of the most prominent examples. Historical evidence suggests that, during the First Republic, the Mafia provided electoral support to the Christian Democratic Party (DC) in exchange for economic advantages, particularly in the construction sector (De Feo and De Luca, 2017). However, in the Second Republic, Mafia-aligned municipalities exhibited a shift in political allegiance, favoring Forza Italia (FI) irrespective of the level of electoral competition (Buonanno et al., 2016).

We focus on the allocation of confiscated Mafia assets for social purposes, a key policy tool introduced in the 1990s to curb organized crime. Judicial records suggest that the failure to allocate these assets for social use effectively enables the Mafia to regain control over them¹, thus serving as a potential reward for electoral support. Importantly, while governments do not control the confiscation process itself, they do have discretion over the subsequent allocation of assets, making this a viable channel for rewarding electoral collusion.

Empirically, we analyze Sicilian municipalities from 1992 to 2024. We start by presenting some suggestive evidence on vote manipulation. By looking at majoritarian elections' voting outcomes, we offer evidence of a suspiciously high density of municipalities where the Forza Italia candidate won by a few votes. This anomaly is particularly true for municipalities controlled by the Mafia. Since swing municipalities are the ones where vote buying would be most valuable to win the electoral district, we interpret this potential manipulation of votes as vote buying performed by the Mafia. For a first empirical exercise, we present a Regression Discontinuity design looking at swing municipalities at majoritarian national elections. We compare municipalities in which a Forza Italia candidate barely won with respect to barely lost to a competitor, finding a sharp drop in relative destinations from mafia in the former group right after the elections. This drop is particularly driven by municipalities under the control of mafia, indicating that it might have been a reward from electoral collusion with the party, in case that the vote

¹In the words of the Undersecretary of the Ministry of the Interior: "Our goal is to prevent the risk of such assets being reclaimed by organized crime" (Ferro, 2023).

buying was effective (i.e. that the candidate won). Given the failure of the McCrary test, we exercise caution in giving a causal interpretation to these results, as the sorting between winning and losing municipalities could be non-random. However, the non-randomness should be precisely due to vote buying, which is the key feature of interest. Moreover, balance tests show no systematic differences in observable characteristics around the threshold, and placebo tests confirm that no discontinuity in assets reallocation existed before the election—further strengthening the interpretation that the post-election drop is driven by vote buying.

We then use an alternative identification strategy, exploiting the sharp decline in Christian Democratic votes after the Mafia withdrew its electoral support in 1987 as a proxy for historical vote-buying capacity. The Christian Democratic Party (DC) had long benefited from Mafia-backed electoral mobilization, but this alliance fractured when DC leaders failed to intervene in favor of Cosa Nostra during the Palermo Maxi Trial. In response, the Mafia leadership ordered a strategic shift of votes away from DC, leading to a sudden and well-documented drop in their vote share. This rare historical episode allows us to construct a proxy for the magnitude of vote-buying capacity. Remarkably, our quantitative estimates of vote buying closely align with those of Arlacchi (2010) and De Feo and De Luca (2017).

Our results confirm that areas where the Mafia historically had greater vote-shifting power saw a stronger decline in confiscated assets allocation when Forza Italia was in power, particularly in periods of heightened electoral competition.

Rejoining the two channels (the extent of vote buying and its economic reward), we use an instrumental variable (IV) approach to establish a causal link between vote-buying capacity and policy concessions (through variations in the share of votes obtained Forza Italia at the national elections). This allows us to exploit the variation in support for Forza Italia that is explained by historical vote-buying capacity, strengthening the causal interpretation of our findings.

This paper offers a multifold contribution addressing several strands of the literature. First, we propose a theoretical advancement in previous electoral probabilistic models in the presence of a criminal organizations. This strains hinges on the previously proposed extensions of the seminal contribution by Lindebeck and Weibull (1987). Acemoglu et al (2013) consider an N-constituency election under majoritarian system, where the incumbent party may tolerate paramilitaries' violence in swing district in exchange of their ability to move votes from one candidate to the other. Similarly, De Feo and De Luca (2017) propose a single-constituency probabilistic model under proportional representation where candidates compete à la Bertrand to obtain the electoral support of the mafia, which in turn will coerce votes towards the best offer. Instead, our model introduces a novel assumption, namely that parties' proposed antimafia policy affect mafia electoral preferences, thereby triggering a global deterioration in the anti-mafia policies proposed by both parties in order to secure the votes. The implication is that the level of electoral competition influences only the reward (i.e., the anti-mafia policy),

because it increases the value of the votes provided by mafias, whereas the latter are constant and only depend on predetermined exogenous capacity (e.g., control of the territory).

Second, this work contributes to the empirical literature on mafia-related electoral frauds and vote coercion and the interplay between states and criminal organizations. While much has been said on mafias' complementary use of violence and bribes (Dal Bó et al., 2006) to influence policy (Alesina et al., 2019; Di Cataldo and Mastrorocco, 2022), mostly at the local level, fewer studies have focused on vote-buying as a lobbying instrument at the broader, national level. Building on the seminal work by Acemoglu et al (2013), De Feo and De Luca (2017)credibly show that during the Italian First Republic (1948-92) Cosa Nostra brought votes to Christian Democrats in Sicily when electoral competition from the Communist Party at the national level was more pronounced. The authors also offer suggestive evidence suggesting that the mafia obtained significant advantage in the building sector as a counterpart. Likewise, Buonanno et al (2016) show that -irrespective of electoral competition - during the Second Republic (1994-2013) Forza Italia tended to obtain higher vote shares in municipalities controlled by Sicilian mafia, although the other side of the deal was left unexplored. We complement previous research by showing that, in exchange for mafia's electoral support to Forza Italia, the allocation of confiscated assets in Sicily dropped during Berlusconi's governments. Aligning with our theoretical predictions, this might explain why mafia electoral involvement was apparently constant during the Second Republic, while it depended on electoral competition during the First one² (where anti-mafia policy was not under deal as mafia was not even recognized as a crime). To the best of our knowledge, this is the first causal and quantitative evidence of vote buying, moving beyond anecdotal or correlational findings. Additionally, we identify the specific economic reward obtained in return for electoral support, demonstrating how electoral collusion translates into concrete policy concessions. Finally, we also provide a quite reliable quantification of vote buying capacity across Sicilian municipalities, while the previously mentioned studies mostly rely on a set of qualitative (binary) indicators of mafia presence.

The rest of the article is organized as follows. Section 2 presents and solves the theoretical model. Section 3 describes the data and institutional background. Section 4 presents the empirical strategy and results. Concluding remarks follow.

2 Theoretical Framework

We develop a two-stage probabilistic model (Lindbeck and Weibull, 1987) to analyze electoral competition between two parties, A and B, under both a proportional and a majoritarian

²On the difference between the First and Second Republic, the Italian anti-mafia prosecutor Nicola Gratteri explains that "Politics has grown weaker than the mafia. Thirty or forty years ago, mafiosi would approach politicians seeking favors; today, it is often politicians who seek out and align themselves with the mafia." (Gratteri, 2022). In the interview, there is an explicit mention to "favors" other than public procurements.

electoral system in n constituencies, potentially heterogeneous in the level of mafia penetration. For the sake of simplicity, each district k is populated by a mass of voters normalized to 1 and penetrated by an independent clan. In the first stage, parties A and B simultaneously commit to their anti-mafia policy q_{Ak} and q_{Bk} for each district k, aiming to maximize their respective probabilities of winning the election:

$$\begin{cases} U_A = \Pr(A \text{ wins}), \\ U_B = \Pr(B \text{ wins}) = 1 - \Pr(A \text{ wins}), \end{cases}$$
(1)

where U_A and U_B represent the expected utilities of the two parties, i.e., public office rent is normalized to 1.

In the second stage, elections take place. Each mafia clan chooses the number of votes (m_k) to deliver (Acemoglu et al., 2013; De Feo and De Luca, 2017) to one of the parties (say, party A) in each district k, with the objective of minimizing its loss function:

$$\pi_k = -\Pr(A \text{ wins})q_{Ak} - \Pr(B \text{ wins})q_{Bk} - \frac{m_k^{\gamma_k}}{\gamma_k},$$
(2)

where $\gamma_k > 1$ represents the convexity of the clans' cost function in terms of votes delivered; that is, a higher level of γ_k corresponds to higher costs of vote buying in district k.

Inspired by standard probabilistic voting models, parties commit to policies but take their ideological stance as given. This may capture other policies, unrelated to mafia, they cannot commit to (Lindbeck and Weibull, 1987; Acemoglu et al., 2013). Each district hosts four types of electors (of population n_1, n_2, n_3 and n_4 , respectively), according to their ideological stance. The first group consists of purely ideological individuals who do not care about the proposed anti-mafia policies. They may vote for parties A or B depending on their ideological stance. The second group consists of electors who never vote for party B but might abstain if the anti-mafia policy proposed by party A is too mild. Likewise, the third group never votes for party A but might abstain if the anti-mafia policy proposed by party B is too mild. Finally, electors of the fourth group might cast a vote for either of the two parties, depending on their ideology and on the proposed anti-mafia policy.

The utility function of the representative elector of group 1 in district k when party i = A, B is in charge can be expressed as follows:

$$U_{hk}^1 = v_{hk},\tag{3}$$

where $v_{hk}^1 = v_{hAk}^1 - v_{hBk}^1$ represents elector h's ideological preference for party A over party B. We also define V_i^1 as the number of group 1 individuals who prefer party A over B (i.e., those such that the RHS of equation (3) is positive) and $\Delta V_k^1 = V_{Ak} - V_{Bk}$ is the number of voters of group 1 who vote for party A net of that of voters for B. Conversely, the utility of elector h of group 2 is:

$$U_{hk}^2 = ln(q_{Ak}),\tag{4}$$

Electors of group 2 will vote if the utility they derive from the anti-mafia policy proposed by their preferred party is greater than a given threshold $T_A \sim U[0, \frac{1}{a_k}]$, where a_k is the sensitivity of type 2 electors to anti-mafia policies. Therefore, the expected number of electors of group 2 who will actually vote is:

$$n_2 \Pr(T_{Ak} < \ln(q_{Ak})) = n_2 a_k \ln(q_{Ak}) \tag{5}$$

Analogously, the utility of elector h of group 3 is:

$$U_{hk}^3 = \ln(q_{Bk}) \tag{6}$$

Let $T_{BK} \sim U[0, \frac{1}{b_k}]$, such that the expected number of type 3 electors who will actually cast their vote is:

$$n_3 b_k ln(q_{Bk}) \tag{7}$$

Finally, the utility of elector h of group 4 is:

$$U_{hik}^4 = ln(q_{ik}) + v_{hik}^2 \tag{8}$$

Define $v_{hk}^2 = v_{hAk}^2 - v_{hBk}^2 \sim U\left[-\frac{1}{2}, \frac{1}{2}\right]$ as elector h's ideological preference for party A over party B. Then, the difference between the number of group 4 individuals who vote for party A and that that of the voters of party B is:

$$n_4 Pr(ln(q_{Ak}) - ln(q_{Bk}) > v_{hBk}^2 - v_{hAk}^2) = n_4 [ln(q_{Ak}) - ln(q_{Bk}) + \frac{1}{2}]$$
(9)

Overall, the number of votes N_{ik} obtained by party A in district k is:

$$\begin{cases} N_{Ak} = \frac{n_4}{2} - n_4 ln(q_{Bk}) + (n_2 a_k + n_4) \ln(q_{Ak}) + V_{Ak}, \\ N_{Bk} = \frac{n_4}{2} - n_4 ln(q_{Ak}) + (n_3 b_k + n_4) \ln(q_{Bk}) + V_{Bk} \end{cases}$$
(10)

2.1 Proportional Electoral System

Without loss of generality, let $\beta_k = n_3 b_k + 2n_4 > n_2 a_k + 2n_4 = \alpha_k > 0$ and express the probability that party A wins the election as follows:

$$\Pr(A \text{ wins}) = \Pr\left(\sum_{k=1}^{n} m_k + \sum_{k=1}^{n} \alpha_k \ln(q_{Ak}) + \Delta V > \sum_{k=1}^{n} \beta_k \ln(q_{Bk})\right),\tag{11}$$

where $\Delta V = \sum_{k=1}^{n} \Delta V_k^1 \sim U\left[-\frac{1}{2\phi}, \frac{1}{2\phi}\right]$ captures the ideological advantage of party A (Ace-moglu et al., 2013). This leads to:

$$\Pr(A \text{ wins}) = \frac{1}{2} - \Pr\left(\Delta V < \sum_{k=1}^{n} \beta_k \ln(q_{Bk}) - \sum_{k=1}^{n} m_k - \sum_{k=1}^{n} \alpha_k \ln(q_{Ak})\right)$$
$$\Pr(A \text{ wins}) = \frac{1}{2} - \phi\left(\sum_{k=1}^{n} \beta_k \ln(q_{Bk}) - \sum_{k=1}^{n} m_k - \sum_{k=1}^{n} \alpha_k \ln(q_{Ak})\right)$$
(12)

The payoff functions can be rewritten as:

$$\begin{cases} U_{A} = \frac{1}{2} - \phi \left(\sum_{k=1}^{n} \beta_{k} \ln(q_{Bk}) - \sum_{k=1}^{n} m_{k} - \sum_{k=1}^{n} \alpha_{k} \ln(q_{Ak}) \right), \\ U_{B} = \frac{1}{2} + \phi \left(\sum_{k=1}^{n} \beta_{k} \ln(q_{Bk}) - \sum_{k=1}^{n} m_{k} - \sum_{k=1}^{n} \alpha_{k} \ln(q_{Ak}) \right), \\ \pi_{k} = \left(q_{Ak} - q_{Bk} \right) \left[\frac{1}{2} - \phi \left(\sum_{k=1}^{n} \beta_{k} \ln(q_{Bk}) - \sum_{k=1}^{n} m_{k} - \sum_{k=1}^{n} \alpha_{k} \ln(q_{Ak}) \right) \right] - q_{Ak} - \frac{m_{k}^{\gamma_{k}}}{\gamma_{k}}. \end{cases}$$
(13)

2.1.1 Game Solution

In the second stage, clans maximize their payoff function by choosing the appropriate number of votes m_k to deliver to their preferred party. Differentiating π with respect to m_k yields a system of k first-order conditions:

$$-(q_{Ak} - q_{Bk})\phi = m_k^{\gamma_k - 1} \tag{14}$$

Solving equation (14) with respect to m_k yields the clans' best response to the anti-mafia policies proposed by the two parties in district k:

$$\bar{m}_k = \left[\phi(q_{Bk} - q_{Ak})\right]^{\frac{1}{\gamma_k - 1}}.$$
(15)

Substituting \bar{m}_k into the payoff functions of the two parties, we obtain:

$$\begin{cases} U_A(\bar{m}_k) = 1 - \phi \left(\sum_{k=1}^n \beta_k \ln(q_{Bk}) - \sum_{k=1}^n \left[\phi(q_{Bk} - q_{Ak}) \right]^{\frac{1}{\gamma_k - 1}} - \sum_{k=1}^n \alpha_k \ln(q_{Ak}) \right), \\ U_B(\bar{m}_k) = \phi \left(\sum_{k=1}^n \beta_k \ln(q_{Bk}) - \sum_{k=1}^n \left[\phi(q_{Bk} - q_{Ak}) \right]^{\frac{1}{\gamma_k - 1}} - \sum_{k=1}^n \alpha_k \ln(q_{Ak}) \right). \end{cases}$$
(16)

Maximizing these expressions with respect to q_{Ak} and q_{Bk} and substituting back into the expression for \bar{m}_k , we find the equilibrium anti-mafia policies and the number of votes allocated in each district:

$$\begin{cases}
q_{Ak}^* = \alpha_k \frac{(\gamma_k - 1)^{\gamma_k - 1}}{\phi(\beta_k - \alpha_k)^{2 - \gamma_k}} = \frac{\alpha_k(\gamma_k - 1)}{\phi m_k^{2 - \gamma_k}}, \\
q_{Bk}^* = \beta_k \frac{(\gamma_k - 1)^{\gamma_k - 1}}{\phi(\beta_k - \alpha_k)^{2 - \gamma_k}} = \frac{\beta_k(\gamma_k - 1)}{\phi m_k^{2 - \gamma_k}}, \\
m_k^* = (\gamma_k - 1)(\beta_k - \alpha_k).
\end{cases}$$
(17)

2.1.2 Results

The model generates several insights. First, the party that is less committed to anti-mafia policies tends to receive electoral support from the mafia. Second, higher electoral competition, combined with mafia involvement (for $\gamma_k < 2$), generates the following effects:

- It widens the gap between the anti-mafia policies of the colluded and non-colluded parties.
- Both parties reduce their anti-mafia efforts, with the colluded party decreasing its efforts more drastically.

Thus, greater electoral competition results in a global deterioration of anti-mafia efforts from political actors. Moreover, the level of electoral competition does not influence the mafia's support for the colluded party, in line with findings by Buonanno et al. (2016).

2.2 Majoritarian Electoral System

By definition, the ideological advantage of party A in the country is the sum of the ideological advantages in each district $\Delta V = \sum_{k=1}^{n} \Delta V_k^1$. Without loss of generality, let n be an odd number and assume that $\Delta V_k^1 > \frac{1}{2}$ for all districts between 1 and $\frac{n}{2} - 1$, and $\Delta V_k^1 < -\frac{1}{2}$ for all districts between $\frac{n}{2} + 1$ and n. In other words, the first (last) $\frac{n}{2} - 1$ districts will always vote for party A(j).

Conversely, assume that in district $\frac{n}{2}$, it holds $-\frac{1}{2} < \Delta V_k^1 < \frac{1}{2}$, and in particular $V_{Ak} \sim U\left[-\frac{1}{2\phi}, \frac{1}{2\phi}\right]$. In plain words, the only swing district is the $\frac{n}{2}$ -th district, such that (dropping the district subscript for the sake of a clearer exposition) the payoff function from equations

(13) modifies as follows:

$$\begin{cases} U_A = 1 - \phi(\beta \ln(q_B) - m - \alpha \ln(q_A)), \\ U_B = \phi(\alpha \ln(q_A) - m - \beta \ln(q_B)), \\ \pi = (q_A - q_B) \left[1 - \phi(\beta \ln(q_B) - m - \alpha \ln(q_A))\right] - q_A - \frac{m^{\gamma}}{\gamma}. \end{cases}$$
(18)

The game solution coincides with that of equations (17) for district $\frac{n}{2}$. However, it shall hold that $m_k^* = 0 \forall k \neq \frac{n}{2}$, i.e., in all other districts there will not be vote buying and the intensity of anti-mafia policy will be maximized. Briefly, under a majoritarian system, vote buying will be limited to swing districts, whereas under proportional representation, it will occur in all mafia-plagued districts.

3 Data and Institutional Background

3.1 A potential reward to Mafia - Misallocation of confiscated assets

Our theoretical framework predicts that politicians seeking electoral support from the mafia offer concessions in the form of reduced anti-mafia enforcement—particularly when electoral competition intensifies. To identify a policy channel through which this reward could be granted, we focus on low-saliency policies, as voters are unlikely to support explicit reductions in antimafia efforts. One such measure, we hypothesize, is the misallocation of confiscated mafia assets. While the judicial authorities independently oversee the confiscation process under the Rognoni–La Torre Law of 1982, the government retains full discretion over the *destination* of these assets. Specifically, the Agenzia Nazionale per l'Amministrazione e la Destinazione dei Beni Sequestrati e Confiscati (ANBSC) is responsible for reallocating them for social use, often by transferring ownership to local associations or municipalities. This distinction is central to our hypothesis: while governments cannot prevent the judiciary from seizing mafia-owned properties, they can strategically slow down, obstruct, or fail to implement the reallocation process (or *destinations*). Our central claim is that by deliberately delaying or mismanaging the assignment of confiscated assets, officials can effectively *reward* the mafia for delivering votes while avoiding public scrutiny. Most citizens do not observe the detailed administrative steps taken (or omitted) to ensure that confiscated properties are promptly repurposed for civic benefits. Consequently, inaction on reallocation is far less visible than directly weakening police operations or dismantling anti-mafia laws. Yet, this failure to finalize reassignments leaves the assets idle or vulnerable to mafia infiltration, essentially subverting the confiscation's intended

punitive effect. According to the non-profit organization $Libera^3$, such destinations deliver a strong blow to mafia interests, because returning confiscated assets to civic or charitable purposes denies crime syndicates both their revenue streams and their territorial legitimacy. Our premise is that a government seeking mafia support has an incentive to slow or halt the reallocation process in strategic ways, effectively allowing criminal organizations to reassert *de facto* control over seized properties. In the empirical analysis that follows, we leverage detailed data on how confiscated assets were handled in Sicilian municipalities. We posit that systematic shortfalls in reallocation outcomes can be a strategic choice by politicians to grant the mafia policy concessions while avoiding the more noticeable political costs that a direct rollback of anti-mafia laws would entail.

Measuring the Misallocation of Confiscated Assets. To empirically assess whether politicians strategically misallocate confiscated mafia assets, we construct a continuous indicator that captures the extent to which confiscated properties are reassigned for social use. The core of this measure is based on the share of destinations over residual confiscations in a given period. Instead of using a binary approach, which would obscure differences in the scale of misallocation, we develop an index ranging from -1 to 1, allowing us to distinguish between varying degrees of reallocation success or failure.

The index is estimated at the **municipality-legislature level**, meaning that confiscations and destinations are aggregated over the full time period between elections⁴. The **positive part** of the index is defined as the share of destinations over the **residual stock of confiscations**—that is, all the properties that had already been confiscated but had not yet been reallocated at the time the government took office. The **baseline case**, where neither confiscations nor destinations occur in a given period (0/0), is assigned a value of zero, treating municipalities with no activity as neutral cases. The **negative part** of the index captures cases where confiscations occurred, but no destinations were made. In these instances, the index takes values between -1 and 0, approaching -1 as the volume of unallocated confiscations increases. To capture the idea that failing to allocate a large number of confiscated assets represents a

³Libera. Associazioni, nomi e numeri contro le mafie (commonly referred to as Libera) is an Italian nongovernmental organization founded in 1995 with the mission of combating organized crime through civic engagement, education, and advocacy. One of its core activities is promoting the social reuse of confiscated mafia assets, ensuring that these properties are repurposed for community and social benefit rather than falling back under criminal control. Libera played a key role in the passage of Law No. 109/1996, which institutionalized the redistribution of confiscated assets for public interest. The organization operates nationally and internationally, collaborating with civil society groups, educational institutions, and policymakers to strengthen anti-mafia efforts.

⁴Since assets destination is managed by a government agency, an ideal approach would be to aggregate the data by government term. However, when a government is replaced without new elections, we would lose variation in vote shares, which is crucial for analyzing vote-buying mechanisms. For our purposes, when focusing on Berlusconi-led governments, approximating government terms as legislative periods is reasonable, as in two instances Berlusconi's governments were replaced by technical governments for periods of about one year each.

more severe policy failure, we use an inverse logarithmic transformation, ensuring that larger backlogs of confiscations receive progressively greater penalties. The function $-1 + \frac{1}{\log(x+2)}$ is monotonically increasing in x, meaning that as residual confiscations grow, the index moves closer to -1^5 .

This allows us to differentiate between minor and severe failures in reallocation: for example, a situation where one confiscated property remains unassigned (0/1) is treated as a relatively small policy failure, whereas a situation where a hundred confiscated properties remain unassigned (0/100) is treated as a much greater failure. By incorporating the intensity of misallocation, rather than treating all non-reallocation cases as equally severe, our measure better captures strategic political behavior.

Formally, if a given municipality i has a residual stock of confiscated assets StockConf_i and a total number of destinations TotDest_i over a given legislative period t, our **Relative Destinations Index** is defined as:

Rel. Destinations
$$\operatorname{Index}_{it} = \begin{cases} 0, & \text{if } \operatorname{StockConf}_{it} = 0 \text{ and } \operatorname{TotDest}_{it} = 0, \\ \frac{\operatorname{TotDest}_{it}}{\operatorname{StockConf}_{it}}, & \text{if } \operatorname{StockConf}_{it} > 0 \text{ and } \operatorname{TotDest}_{it} > 0. \\ -1 + \frac{1}{\log(\operatorname{StockConf}_{it} + 2)}, & \text{if } \operatorname{StockConf}_{it} > 0 \text{ and } \operatorname{TotDest}_{it} = 0. \end{cases}$$

$$(19)$$

This approach enables us to recover data that would otherwise be lost, particularly in cases where neither confiscations nor reallocations occur. Furthermore, by using a continuous measure instead of a binary one, we avoid imposing arbitrary thresholds and allow for a more nuanced analysis of how governments handle the reallocation process. If political actors systematically delay or obstruct the destination of confiscated assets, this should be reflected in persistent declines in our reallocation index—particularly when electoral incentives align with rewarding mafia support. This measure thus provides a comprehensive way to test our hypothesis while leveraging the full informational content of the data.

Mafia presence

Similarly to seminal papers studying the electoral involvment of Sicilian Mafia (Buonanno et al., 2016; De Feo and De Luca, 2017), we gather data on mafia geographical distribution from two main sources. Specifically, we create a dummy for mafia presence equal to 1 for municipalities where either the Italian military police (Comando Generale dell'Arma dei Carabinieri, 1987) or the researchers of the University of Messina (Centro Studi e Documentazione sulla Criminalità Mafiosa, 1994) -or both- found signals of Cosa Nostra activity (Figure 1). Crucially for our

⁵The inclusion of +2 inside the logarithm prevents undefined values at 0 and ensures that even for small numbers of unallocated confiscations, the index remains strictly below zero.

Figure 1: Dummy for Mafia presence



analysis, "mafia" vs "non mafia" areas are characterized by pretty similar average values of our Relative Destinations Index (Table 1).

Majoritarian electoral system

First, we focus on voting outcomes for the national elections which adopted a majoritarian system. In the national elections held in 1994, 1996, 2001, 2018, and 2022, members of the Chamber of Deputies were selected in part through a first-past-the-post system within their electoral district, where the candidate with the highest number of votes won, regardless of whether they obtained an absolute majority. During these elections, Italy was divided into a varying number of single-member districts for the majoritarian portion of the Chamber of Deputies elections. For the elections held in 1994, 1996, 2001, Italy had 475 single-member districts out of 630 total seats, with 52 districts in Sicily. In 2018, under the "Rosatellum" system, there were 232 single-member districts out of 630 total seats, there were 147 single-member districts out of 400 total seats, with 16 districts in Sicily.

In Table 1 we present (among the others) some summary statistics for Sicilian municipalities under the majoritarian system. In particular, we document the absolute number of votes received by FI candidates, a dummy indicating if the local candidate received the majority of votes, a dummy for the mayor being ⁶, the dummy for mafia presence, and our index of Relative

⁶Note that the mayor is elected from local elections, not national ones.

Destinations.

As we can see from Table 1, in 76% of Sicilian municipalities the Forza Italia candidate received the majority of votes under the majoritarian system. However, only 12.9% have Forza Italia mayors, since at the local level there is a high diffusion of civic lists, local parties without a clear ideological position. Moreover, two thirds of these municipalities are considered to be under the Mafia influence.

Proportional electoral system

In the second part of the empirical analysis, we consider a *mandamento*-legislature panel covering the years between 1994 and 2022 -i.e., from the onset of Forza Italia to the present day, as at least 25% of the Parliamentary seats assigned at all national elections in that period were assigned through a proportional electoral system. *Mandamento* was an administrative division in the Kingdom of Italy (1861-1946). At the time, Sicily had about 360 municipalities and 160 *mandamenti*, meaning each *mandamento* comprised two or three municipalities on average. We adopt *mandamenti* as main unit of observation as municipalities due to the plausible presence of geographic spillovers across municipalities. This is partly due to the small average dimension of Italian municipalities. Most important, since the Sicilian mafia's origins date back to the Kingdom of Italy's early years (Buonanno et al., 2015), the earliest mafia groups recognized these existing administrative boundaries (and not municipalities) to delineate their territorial influence. Nonetheless, we remark that the analysis at the municipal level⁷ yields analogous results. For both the majoritarian and proportional systems, all the electoral data are collected from official sources (Ministero dell'Interno).

4 Empirical Analysis

4.1 Majoritarian electoral system

We begin our empirical analysis by examining electoral outcomes in majoritarian elections to assess whether vote buying influenced close races. At the municipality-election level, we define *Electoral margin* as the difference in vote shares between the first- and second-place candidates, provided that at least one of them was affiliated with Forza Italia.⁸ This variable takes a value of zero when the two candidates receive the same number of votes, is positive when the Forza Italia candidate wins, and negative when the Forza Italia candidate loses.

This electoral margin closely resembles the running variable in a standard Regression Discontinuity Design (RDD) based on close elections (e.g., Curto-Grau et al, 2018). Small absolute

 $^{^7\}mathrm{Available}$ upon request.

⁸We only include municipalities where the Forza Italia candidate was either first or second.

Majoritarian Dataset (municipalities)	Obs	Mean	Std. Dev.	Min	Max
Rel. Destinations Index	2115	102	.415	851	1
FI votes	2845	3085.715	8257.93	8	212656
FI majority	3136	.764	.425	0	1
FI mayor	3136	.130	.336	0	1
Mafia presence	3136	.669	.470	0	1
Proportional Dataset (mandamenti)					
Rel. Destinations Index	1,420	-0.110	0.407	-0.854	1
Share Forza Italia (1994-2001) * Berlusconi govt.	$1,\!413$	8.413	12.449	0	41.886
Drop DC $(1979-87)$ * Berlusconi govt.	1,413	0.951	2.906	-10.989	14.814
Drop DC $(1979-87)$ * Electoral competition	942	-0.085	0.296	-1.738	1.289
Municipalities dissolution	$1,\!570$.148	.356	0	1
Mafia murders	$1,\!570$.608	.488	0	1
Proportional Dataset (mafia vs non mafia mandamenti)					
Rel. Destinations Index (mafia)	702	114	.418	854	1
Rel. Destinations Index (non mafia)	576	101	.427	822	1

 Table 1: Summary Statistics

values of this variable indicate *swing municipalities*, where vote buying is most valuable for securing a victory. By contrast, municipalities with very large positive or negative electoral margins are those where the outcome was effectively predetermined, and vote buying would have little strategic value. Given that vote buying is expected to systematically shift municipalities toward narrow victories, we assess whether the electoral margin exhibits manipulation near the threshold. If so, this would suggest that the mafia successfully intervened to deliver votes to Forza Italia candidates in pivotal municipalities⁹.

To formally test for manipulation, we implement the McCrary test (McCrary, 2008), a widely used validity check in RDD settings. The test detects whether there is a discontinuity in the density of the running variable at the threshold, which would indicate that observations were systematically pushed just above or below the cutoff rather than being randomly assigned. If municipalities have any control over their placement relative to the threshold—either through direct voter mobilization or illicit practices such as vote buying—this can result in a discernible jump in the density of the electoral margin at zero. The test estimates the density of the running variable separately on each side of the threshold¹⁰ and then conducts a statistical test for a discontinuity.

Table 2 presents the results of the McCrary test for the full sample and separately for mafiaand non-mafia-influenced municipalities.

⁹Manipulation of the running variable is often considered problematic for an RDD approach. However, as we discuss below, in this specific case, the failure of a manipulation test may be seen as evidence consistent with our hypothesis rather than an outright violation of causal inference assumptions.

¹⁰The cutoff in our case is zero, where the Forza Italia candidate and the main competitor received the same number of votes.

	McCrary test					
	(1)	(2)	(3)			
	Full Sample	Mafia	No Mafia			
T-test	1.876	1.942	1.159			
P-values	0.060*	0.052^{*}	0.246			
Observations	905	642	358			
No. Elections	5	5	5			

Table 2: McCrary test for manipulation of electoral margin

Notes: McCrary test for density manipulation in the running variable electoral margin. Electoral margin is obtained from the absolute difference at the municipality level between the vote share of a Forza Italia candidate and the competitor at national elections with the majoritarian system. The null hypothesis of the test is no manipulation in the running variable, i.e. that the density of the variable above and below the cutoff are identical. We report here the robust method to compute the T-statistic and its p-value. *** p<0.01, ** p<0.05, * p<0.1

Table 2 shows that the McCrary test rejects the null hypothesis of no manipulation for both the full sample and the mafia-influenced municipalities, while failing to reject it for nonmafia municipalities. This suggests that electoral margins were systematically shifted in mafiaaffected municipalities, resulting in a disproportionately high number of Forza Italia victories in close races. Figure 2 further illustrates this pattern by showing the density of the electoral margin near the cutoff. The manipulation testing plot is presented for the full sample, while the mafia-only and non-mafia municipalities' graphs are in Appendix E.



Figure 2: McCrary test - Full Sample

Notes: McCrary test for significant difference in the density of the electoral margin above and below the cutoff. The municipalities taken into consideration are all the Sicilian municipalities, with their electoral outcomes for majoritarian elections between 1994 and 2022.

Visual inspection of Figure 2 supports the presence of manipulation, as there is an excess mass of municipalities just above the threshold. This pattern is particularly pronounced in mafia-controlled areas (see Figures E.1 and E.2). This is consistent with our hypothesis that the mafia strategically mobilized votes to help Forza Italia secure victories in swing municipalities.

Interpreting the RDD Despite Manipulation. At first glance, the evidence of manipulation uncovered by the McCrary test might appear to invalidate a standard RDD analysis, since a basic requirement for unbiased local average treatment effects is that units cannot precisely sort around the cutoff (McCrary, 2008). However, in our particular context, this apparent failure of the test is in fact consistent with *vote buying*—which is precisely the phenomenon we aim to detect. We argue as follows:

- 1. *Manipulation Implies Vote Buying.* If there were no manipulation near the threshold, we would have little reason to believe that vote buying (and thus the mafia's ability to shift votes) was at play in these swing municipalities. By contrast, observing bunching just above the cutoff is consistent with the hypothesis that the mafia strategically delivered votes to push the Forza Italia candidate over the threshold.
- 2. *Partial Rather Than Perfect Sorting.* Even if the mafia can influence electoral outcomes, it cannot do so deterministically. Vote shares remain noisy, shaped by many factors beyond

mafia involvement. Thus, while we do see evidence of manipulation, there should still be nontrivial randomness in whether a candidate *barely* wins or loses in any specific municipality. This residual uncertainty leaves room for a quasi-random comparison around the cutoff. Moreover, in municipalities where the mafia's grip is very strong, Forza Italia wins by comfortable margins, meaning these towns do not appear near the threshold in the first place. Thus, the municipalities $we \ do$ observe at the cutoff are precisely those in which the mafia's vote-delivering capacity could not guarantee a decisive margin. This adds to the notion that, despite some manipulation, the exact placement on one side or the other of zero still retains a quasi-random component.

- 3. Effect Identified Within Mafia Municipalities. A key empirical finding (detailed below) is that the effect of a Forza Italia victory on our outcome of interest (i.e., the misallocation of confiscated assets) emerges within the subset of municipalities identified as mafia-influenced. That is, among municipalities where the mafia is active, we observe a significant discontinuity in assets reallocation when comparing those that barely secured a Forza Italia victory to those that barely failed. In contrast, no such discontinuity appears in non-mafia municipalities. This suggests that we are not comparing fundamentally different types of places across the threshold; rather, our estimates capture a difference within the group of municipalities where mafia vote-buying efforts are plausibly concentrated. The key difference between municipalities just above and just below the threshold is not their broader characteristics, but rather whether their vote-buying efforts were sufficient to secure a Forza Italia victory.
- 4. Balance and Pre-Trends. In addition, our balance tests reveal no significant discontinuities in other municipality-level covariates at the cutoff, nor do we observe a jump in the reallocation of confiscated assets before the election. The discontinuity emerges only after a Forza Italia victory is secured, suggesting that municipalities on either side of the threshold were indistinguishable before the election. We present a balance test of covariates in Table 3, while in the next subsection we discuss pre-trends. This pattern strengthens the argument that any observed post-electoral difference is driven by policy changes rather than pre-existing differences in municipality types.
- 5. Interpreting the Coefficient as a Vote-Buying Reward. Even if some unobserved characteristics allow certain municipalities to succeed in tipping a Forza Italia victory, it is challenging to explain why such municipalities would then experience a systematic decrease in confiscated-assets reallocation unless it is indeed a strategic concession. That is, if the only difference between barely-won and barely-lost municipalities is that the mafia delivered sufficient votes in one set but not the other, then a discontinuous drop in

reallocation right after a victory strongly suggests a post-electoral reward. Although the standard RDD interpretation (i.e. local random assignment at the cutoff) may be complicated by vote sorting, the result that victorious municipalities see lower assets reallocation is still consistent with our central claim about vote buying.

Overall, the presence of manipulation near the threshold, rather than invalidating our design, *supports* our hypothesis that the mafia intentionally 'sorts' certain municipalities just above the cutoff, thus triggering a *reward mechanism* once Forza Italia secures victory. In the subsequent section, we formalize this intuition by estimating the effect of narrowly winning on the (mis)allocation of confiscated mafia assets.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Pop.density	Young pop.	Old pop.	Housewives	Pop. (\log)	Agric. L.F.	FLFP	Illiterate pop.	Graduated pop.
RD_Estimate	79.880 (89.552)	-0.006 (0.005)	0.015 (0.010)	-0.008 (0.007)	0.053 (0.175)	0.002 (0.014)	0.006 (0.006)	-0.002 (0.002)	0.002 (0.003)
Observations	1,823	1,773	1,878	1,773	1,878	1,773	1,773	1,878	1,773

 Table 3: Balance tests

Notes: Regression Discontinuity estimated coefficients. The running variable is the Electoral margin, the vote difference between a Forza Italia candidate and the main competitor at national elections under the majoritarian system. The dependent variables are a set of covariates at the municipality level: population density, share of population under 25 years old, share of population over 65 years old, share of housewives over the female population, logarithm of population, share of working-age population in the agricultural sector, female labor force participation, share of illiterate population, share of graduated population. All of these variables come from the Istat website. Only a first degree polynomial is considered, and the optimal bandwidth is chosen by the minimization of the Mean Squared Error. The period of reference is between 1994 and 2022. *** p<0.01, ** p<0.05, * p<0.1

Regression Discontinuity Design

In Section 4.1, we documented evidence of manipulation in the running variable *Electoral mar*gin, suggesting that vote buying systematically shifted certain municipalities toward narrow Forza Italia victories. While this raises concerns for standard RDD assumptions, we argue that the observed sorting does not necessarily invalidate causal inference in this context. Instead, the discontinuity we observe is precisely the mechanism through which vote buying operates, providing meaningful variation for identifying its consequences.

To analyze the effect of a Forza Italia victory in swing municipalities on the reallocation of confiscated mafia assets, we estimate the following equation:

$$Rel.Destination_{i,t} = \beta_0 + \beta_1 ElectoralMargin_{i,t} + \beta_2 FIWin_{i,t} + \epsilon_{i,t}$$
(20)

	Relative Destinations Indicator				
	(1)	(2)	(3)		
	Full Sample	Mafia	No Mafia		
Forza Italia Candidate Win	-0.152**	-0.214^{***}	-0.039		
	(0.061)	(0.080)	(0.056)		
mean(Y)	-0.128	-0.127	-0.130		
std(Y)	0.383	0.377	0.394		
Observations	$1,\!319$	837	482		
No. Elections	5	5	5		

Table 4: Regression Discontinuity results

Notes: Regression Discontinuity estimated coefficients. The running variable is the Electoral margin, the vote difference between a Forza Italia candidate and the main competitor at national elections under the majoritarian system. The dependent variable is Relative destinations in the years after the election of reference. Only a first degree polynomial is considered, and the optimal bandwidth is chosen by the minimization of the Mean Squared Error. The first column includes all Sicilian municipalities, the second only the ones under the control of the mafia and the third the ones not under its control. The period of reference is between 1994 and 2022. *** p<0.01, ** p<0.05, * p<0.1

where $ElectoralMargin_{i,t}$ is the difference in vote share between the Forza Italia candidate and the main competitor in national elections under the majoritarian system, and $FIWin_{i,t}$ is a dummy equal to 1 if the Forza Italia candidate won in municipality *i* at time *t*.

This design effectively compares municipalities where a Forza Italia candidate barely won versus barely lost, allowing us to examine differences in the reallocation of confiscated assets post-election. Given that the McCrary test detects manipulation at the cutoff, we remain cautious in attributing a fully causal interpretation to β_2 . However, as discussed earlier, the sorting into winning and losing municipalities is not perfectly deterministic, and residual quasirandomness near the threshold allows us to interpret the results as suggestive evidence of a reward mechanism.

Table 4 shows that a Forza Italia victory is associated with a significant decrease in the relative destination of confiscated assets, but this effect is entirely driven by mafia-controlled municipalities. In these municipalities, the estimated coefficient is 50% larger in magnitude than in the full sample, while in non-mafia municipalities, the effect is small and statistically insignificant. This pattern is consistent with the idea that electoral support provided by the mafia was rewarded through reduced assets reallocation, but only in municipalities where the mafia exerted influence.

Figures 3a and 3b present the graphical evidence for mafia and non-mafia municipalities, respectively (see Figure E.3 for the full sample). The visual evidence confirms a clear drop in relative destinations following a Forza Italia victory, particularly in mafia municipalities.





(b) Non-mafia municipalities

Notes: Regression Discontinuity fitted lines. The running variable is the Electoral margin, the vote difference between a Forza Italia candidate and the main competitor at national elections under the majoritarian system. The dependent variable is Relative destinations in the years after the election of reference. The first panel includes only Sicilian municipalities under the control of the Mafia, while the second panel includes municipalities not under Mafia control. The period of reference is 1994-2022.

As a robustness check, Table 5 reports a placebo test using lagged relative destinations as the dependent variable, capturing the level of assets reallocation during the legislature immediately preceding the election at which the municipality was near the threshold. If municipalities where Forza Italia narrowly won were systematically different from those where they narrowly

	Lagged Relative Destinations				
	(1)	(2)	(3)		
	Full Sample	Mafia	No Mafia		
Forza Italia Candidate Win	-0.018	-0.018	-0.002		
	(0.070)	(0.088)	(0.122)		
mean(Y)	-0.05	-0.04	-0.07		
std(Y)	0.41	0.41	0.41		
Observations	1,058	671	387		
No. Elections	5	5	5		

 Table 5: Regression Discontinuity results - Lagged outcome

Notes: Regression Discontinuity estimated coefficients. The running variable is the Electoral margin, the vote difference between a Forza Italia candidate and the main competitor at national elections under the majoritarian system. The dependent variable is Lagged Relative destinations, which are the relative destinations in the period between the election of reference and the previous one. Only a first degree polynomial is considered, and the optimal bandwidth is chosen by the minimization of the Mean Squared Error. The first column includes all Sicilian municipalities, the second only the ones under the control of the mafia and the third the ones not under its control. The period of reference is between 1994 and 2022. *** p < 0.01, ** p < 0.05, * p < 0.1

lost, we would expect to see a discontinuity in assets reallocation *before* the election as well. However, the coefficients in all three specifications are close to zero and statistically insignificant, confirming that no pre-trends existed. This further strengthens the interpretation that the observed post-election discontinuity is a consequence of vote buying rather than pre-existing differences between municipalities.

As we can see from this empirical exercise, there were no differential pre-trends in relative destinations in the years before the elections for which we compute the electoral margins. This supports our interpretation of the Regression Discontinuity as a consequence of vote buying in the interested municipalities.

4.2 Proportional electoral system

The RDD analysis provided compelling evidence that mafia-controlled votes were rewarded with reduced reallocation of confiscated assets. However, because the RDD relies on electoral discontinuities, it can only capture the *extensive margin* of vote buying—whether a municipality was included in the deal—but does not provide insight into the *magnitude* of vote buying. In this section, we shift our focus toward an *intensive margin* approach, investigating whether areas with greater mafia vote-buying capacity experienced stronger reductions in assets reallocation.

A natural approach would be to examine whether Forza Italia's vote shares predict lower reallocation of confiscated assets. However, vote shares are inherently endogenous, reflecting not only mafia influence but also broader electoral forces. More importantly, even if cross-sectional differences in Forza Italia vote shares are likely to correlate with long-run mafia influence, there is no reason to assume that *over-time variations* in Forza Italia vote shares accurately reflect changes in vote-buying capacity. Electoral support fluctuates due to a host of political, economic, and social factors, and there is no evidence that mafia-controlled votes shift meaningfully across elections. Instead, a more plausible assumption is that mafia support for political parties is largely *time-invariant*. For this reason, rather than exploiting time variation in electoral results, we focus on a proxy that captures the historical intensity of mafia-controlled voting power.

To proxy for the magnitude of vote buying, we leverage a well-documented historical event in Sicily. Judicial investigations (Falcone and Padovani, 1991) reveal that in 1987, the boss of Cosa Nostra, *Totò Riina*, ordered the criminal organization to move its votes from the Christian Democrats (DC) to the Socialist Party (PSI) as the former *"were not doing their duty"*. In particular, Riina complained that the DC was not helping the criminal organization regarding the developments of the Palermo Maxi-Trial. The meeting concluded with the decision to vote for the PSI, specifically for on. Martelli — not because Martelli had ties to Cosa Nostra, but *"to 'give a slap' to the DC."* (see the full testimony of a Mafia turncoat in appendix D).

This abrupt shift in support resulted in an observable decline in DC vote shares, concentrated in areas where mafia influence was strongest. Consequently, we use the change in DC vote share between 1979 and 1987 as a proxy for the intensity of mafia-controlled voting power at the mandamento level (see Figures E.4 and E.5). Importantly, this measure is antecedent to Berlusconi's entry into politics and is thus plausibly exogenous to his subsequent efforts to limit assets reallocation. While our proxy naturally correlates with long-run mafia strength, it is difficult to conceive of a channel linking it to reduced assets reallocation *except* through vote buying and its political reciprocation.

Specifically, we estimate the following equation:

$$Rel.Destinations_{i,t} = \beta \ Drop \ DC(1979 - 87)_i * Berlusconi \ government_t + \Theta_{i,t} + \epsilon_{i,t} \quad (21)$$

where the dependent variable measures relative destinations in mandamento i during legislature t. The key explanatory variable is the interaction between the drop in DC vote share from 1979 to 1987 and a dummy indicating whether Berlusconi was in power during legislature t.

The specification includes a rich set of fixed effects, denoted by $\Theta_{i,t}$, which control for timeinvariant characteristics at the mandamento level as well as broader institutional and political factors. Specifically, we include mandamento fixed effects, legislature fixed effects, province-bylegislature fixed effects, and judicial district-by-legislature fixed effects¹¹.

 $^{^{11}}$ Sicily is divided into 9 provinces, 24 judicial districts, 157 mandamenti (historically used for administrative

	Relative Destinations - Properties						
	(1)	(2)	(3)	(4)	(5)	(6)	
	Full sample	Mafia	No Mafia	Full sample	Mafia	No Mafia	
Drop DC (1979-87) \times Berlusconi govt.	-0.011* [0.006]	-0.024*** [0.006]	-0.001 [0.008]	-0.011 [0.008]	-0.029*** [0.008]	0.012 [0.009]	
Mandamento FE	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Legislature FE	\checkmark	\checkmark	\checkmark				
Judicial District \times Election FE				\checkmark	\checkmark	\checkmark	
Observations	1,136	624	512	1,136	624	512	
R-squared	0.085	0.125	0.077	0.313	0.436	0.464	
Number of mandamento	142	78	64	142	78	64	

Table 6: Reduced form

Notes: Reduced form estimated coefficients. The explanatory variable is the interaction between the drop in Christian Democrats vote share between the national elections of 1979 and 1987 in mandamento i and a dummy equal to 1 if Berlusconi formed a government during legislature t. The dependent variable is Relative destinations, which are the relative destinations occurred during legislature t. Columns 1 and 4 include all Sicilian mandamenti. Columns 2 and 5 (3 and 6) include only the ones under (not under) the control of the mafia. Columns 1-3 (4-6) employ legislature (judicial district times legislature) fixed effects. The period of reference is between 1994 and 2022. *** p<0.01, ** p<0.05, * p<0.1

We expect to estimate a negative coefficient on β , indicating that during Berlusconi's governments, municipalities with historically stronger mafia vote-buying capacity experienced a greater decline in relative assets destinations.

Results The OLS estimations of equation (21) are reported in Table 6.

Columns (1)–(3) present results including legislature and mandamento fixed effects, while columns (4)–(6) add judicial district-by-legislature fixed effects to further account for regionallevel time-varying confounders. Across specifications, we find a significant negative coefficient β , indicating that a stronger historical vote-buying capacity is associated with lower reallocation of confiscated mafia assets, but only during Berlusconi's governments.

The effect is entirely concentrated in mafia municipalities. In columns (2) and (5), which restrict the sample to mafia-controlled areas, the coefficient is substantially larger in magnitude and more statistically significant than in the full sample. In contrast, columns (3) and (6), which focus on non-mafia municipalities, show small and statistically insignificant effects. Crucially, this lack of an effect in non-mafia areas does not stem from an absence of variation in DC vote share declines or in assets reallocation. Both variables exhibit meaningful cross-sectional differences across all municipalities (Table 1), yet in non-mafia municipalities, the two do not correlate in a systematic way. This reinforces the idea that vote-buying capacity, rather than other potential confounders, is the key driver of the observed reductions in reallocations under Berlusconi's governments.

In terms of magnitude, the estimates suggest that a one percentage point decline in DC vote

purposes but now obsolete), and 391 municipalities (which numbered around 360 in earlier decades).

share between 1979 and 1987 is associated with a reduction in the relative destination index of approximately 0.02 to 0.03 during Berlusconi's governments. This effect is substantial, given that the mean of the relative destination index is around -0.13, implying that the areas with the highest historical vote-buying capacity saw significantly weaker assets reallocations.

Although the extensive battery of fixed effects accounts for time-varying omitted variables at the judicial district level, we further strengthen our analysis by demonstrating that this measure of historical vote-buying capacity translates into higher electoral support for Forza Italia (see the next subsection). Moreover, we establish that the effect of vote-buying capacity on assets reallocation is conditional on Berlusconi being in power—suggesting that the observed reductions in assets reallocation were not merely the result of long-run differences across municipalities, but rather a function of political alignment and reciprocal electoral agreements. Finally, as part of our robustness checks, we show that the negative effect on assets destination is more pronounced when electoral competition in the rest of Italy (excluding Sicily) was high, reinforcing the interpretation that mafia votes were particularly valuable when national political dynamics made forming a stable government more uncertain.

4.3 Mechanisms

Having established that reductions in relative destinations were concentrated in mafia-controlled municipalities with high historical vote-buying capacity, we now examine the second side of the deal: whether municipalities with greater electoral support for Forza Italia experienced similar declines in relative destinations during Berlusconi's governments. To this end, we estimate the following equation:

$$RelDestinations_{i,t} = \gamma Share FI(1994 - 2001)_i * Berlusconi government_t + \Theta_{i,t} + \epsilon_{i,t}, (22)$$

where the dependent variable and the set of fixed effects remain the same as in equation (21). The key explanatory variable, *Share FI (1994-2001)*, represents the average vote share obtained by Forza Italia in mandamento *i* across the first three national elections in which the party participated (1994, 1996, and 2001). *Berlusconi government* is a dummy variable equal to one if Berlusconi was in power during legislature t^{12} . We expect to estimate a negative coefficient γ , suggesting that, during Berlusconi's governments, relative destinations dropped in mandamenti that historically provided stronger electoral backing to Forza Italia.

where the dependent variable and the set of fixed effects remain the same as in equation (21). The key explanatory variable, *Share FI (1994-2001)*, represents the average vote share obtained by Forza Italia in mandamento i across the first three national elections in which the party

¹²Since Sicily is one of Italy's 20 regions, the electoral support of an individual mandamento has a negligible impact on national election outcomes.

participated (1994, 1996, and 2001). Berlusconi government is a dummy variable equal to one if Berlusconi was in power during legislature t^{13} . We expect to estimate a negative coefficient γ , suggesting that, during Berlusconi's governments, relative destinations dropped in mandamenti that historically provided stronger electoral backing to Forza Italia.

We restrict the measure of Forza Italia support to the 1994, 1996, and 2001 elections for several reasons. First, previous studies (Buonanno et al., 2016) have demonstrated that Forza Italia swiftly filled the political vacuum left by the dissolution of the Christian Democrats—the party historically backed by the Sicilian mafia (De Feo and De Luca, 2017). If vote buying influenced electoral outcomes, its effects should be particularly evident in the earliest elections following Forza Italia's emergence. Second, Berlusconi governed almost continuously during the 2000s but held power only briefly in the 1990s (aside from 1994). By restricting our measure of electoral support to the early years of Forza Italia's existence, we mitigate concerns of reverse causality, wherein changes in assets reallocation during Berlusconi's governments could have influenced electoral outcomes. Nevertheless, our findings remain qualitatively robust when alternative measures of Forza Italia support are used. In Appendix C, we show that our results hold when replacing Share FI (1994-2001) with: (i) Forza Italia's vote share in the 1994 election alone, and (ii) a time-varying measure of Forza Italia's vote share in each election t, as well as its interaction with *Berlusconi government*. The latter specification also confirms that municipalities with higher Forza Italia vote shares did not systematically receive fewer assets reallocations *per se*, but only during Berlusconi's governments.

By combining the two sides of the deal—vote-buying capacity and electoral support for Forza Italia—we further establish the causal chain through instrumental variables (IV) estimation. Specifically, we instrument *Share FI (1994-2001)×Berlusconi government* with *Drop DC (1979-87)×Berlusconi government*. This allows us to isolate the variation in Forza Italia support that is plausibly driven by historical vote-buying capacity, thereby strengthening the causal interpretation of our findings. OLS estimations of equation (22) are reported in Appendix B.

Table 7 presents the IV estimates, following the same structure as Table 6. The first three columns include mandamento and legislature fixed effects, while the last three columns replace judicial district-by-legislature fixed effects with province-by-legislature fixed effects. Results using judicial district-by-legislature fixed effects are qualitatively similar but impose a demanding structure on the IV in the split sample¹⁴.

The results confirm our previous findings: municipalities with greater historical vote-buying capacity exhibited stronger electoral support for Forza Italia, and this electoral support was associated with a decline in assets reallocation *only* during Berlusconi's governments. This

¹³Since Sicily is one of Italy's 20 regions, the electoral support of an individual mandamento has a negligible impact on national election outcomes.

¹⁴Available upon request.

Panel A: 2nd stage	Relative Destinations - Properties					
	(1)	(2)	(3)	(4)	(5)	(6)
	Full sample	Mafia	No Mafia	Full sample	Mafia	No Mafia
	010*	0 0 10***	0.000	0.010	0 000**	0.010
Share FI (1994-2001) \times Berlusconi Government	019*	-0.042^{***}	-0.002	-0.016	-0.039**	0.012
	[.010]	[0.016]	[0.013]	[0.012]	[0.002]	[0.013]
	10.040	10 5 41	00.070	00 510	11 107	10.050
Kleibergen-Paap F statistics	40.946	12.541	32.070	33.516	11.137	19.250
R-squared	0.007	-0.02	0.001	0.318	-0.026	-0.013
		77 /		. ~		
Panel B: 1st stage	Share I	°I (1994-200	$(1) \times Berlu$	sconi Govern	ment (1st s	stage)
Panel B: 1st stage Drop DC (1979-87) × Berlusconi Government	Share I 0.062***	$\frac{1}{0.058^{***}}$	$\frac{\mathbf{D1} \times \mathbf{Berlu}}{0.064^{***}}$	0.055***	$\frac{\text{ment (1st s)}}{0.050^{***}}$	stage) 0.057***
Panel B: 1st stage Drop DC (1979-87) × Berlusconi Government	Share I 0.062*** [0.010]	1 (1994-200 0.058*** [0.016]	$\frac{(0.064^{***})}{(0.011]}$	sconi Govern 0.055*** [0.010]	$\frac{\text{ment (1st s)}}{0.050^{***}}$ [0.015]	$\frac{\text{stage}}{0.057^{***}}$ [0.013]
Panel B: 1st stage Drop DC (1979-87) × Berlusconi Government	Share I 0.062*** [0.010]	0.058*** [0.016]	$\frac{(0.064^{***})}{(0.011)}$	sconi Govern 0.055*** [0.010]	<u>ment (1st s</u> 0.050*** [0.015]	stage) 0.057*** [0.013]
Panel B: 1st stage Drop DC (1979-87) × Berlusconi Government R-squared	Share I 0.062*** [0.010] 0.956	61 (1994-200 0.058*** [0.016] 0.951	$ \begin{array}{r} \textbf{D1)} \times \textbf{Berlu} \\ 0.064^{***} \\ [0.011] \\ $	0.055*** [0.010] 0.941	ment (1st s 0.050*** [0.015] 0.940	stage) 0.057*** [0.013] 0.949
Panel B: 1st stage Drop DC (1979-87) × Berlusconi Government R-squared Mandamento FE	Share I 0.062*** [0.010] 0.956 ✓	$ \begin{array}{c} $	$ \begin{array}{r} \textbf{D1} \times \text{Berlu} \\ \hline 0.064^{***} \\ [0.011] \\ \hline 0.952 \\ \end{array} $		$\frac{\text{ment (1st s)}}{0.050^{***}}$ [0.015] 0.940 \checkmark	$ \frac{\text{stage}}{0.057^{***}} \\ [0.013] \\ \hline 0.949 \\ \checkmark $
Panel B: 1st stage Drop DC (1979-87) × Berlusconi Government R-squared Mandamento FE Legislature FE	Share I 0.062*** [0.010] 0.956 ✓ ✓	$ \begin{array}{c} F1 (1994-200) \\ \overline{0.058^{***}} \\ [0.016] \\ \hline 0.951 \\ \\ $	$ \frac{11) \times \text{Berlu}}{0.064^{***}} \\ [0.011] \\ \hline 0.952 \\ \checkmark \\ \checkmark $		$\frac{\text{ment (1st s)}}{0.050^{***}}$ [0.015] 0.940 \checkmark	stage) 0.057*** [0.013] 0.949 ✓
Panel B: 1st stage Drop DC (1979-87) × Berlusconi Government R-squared Mandamento FE Legislature FE Province × Election FE	$ \begin{array}{c} \text{Share I} \\ 0.062^{***} \\ [0.010] \\ \hline 0.956 \\ \checkmark \\ \checkmark \end{array} $	$ \begin{array}{c} 1 \ (1994-200 \\ \hline 0.058^{***} \\ \hline 0.016 \\ \hline 0.951 \\ \checkmark \\ \checkmark \end{array} $	$ \begin{array}{c} \text{0.1)} \times \text{Berlu} \\ \hline 0.064^{***} \\ [0.011] \\ \hline 0.952 \\ \checkmark \\ \checkmark \end{array} $	$ \frac{\text{sconi Govern}}{0.055^{***}} \\ [0.010] \\ \hline \\ 0.941 \\ \checkmark \\ \checkmark $	$\frac{\text{ment (1st s)}}{0.050^{***}}$ $[0.015]$ 0.940 \checkmark	stage) 0.057*** [0.013] 0.949 ✓
Panel B: 1st stage Drop DC (1979-87) × Berlusconi Government R-squared Mandamento FE Legislature FE Province × Election FE Observations	Share I 0.062^{***} [0.010] 0.956 \checkmark 1,136	$ \begin{array}{c} 111994-200 \\ \overline{0.058^{***}} \\ [0.016] \\ \hline 0.951 \\ \\ 624 \end{array} $	$ \begin{array}{r} 11) \times Berlu \\ 0.064^{***} \\ [0.011] \\ \hline 0.952 \\ \\ \\ 512 \end{array} $		$\frac{\text{ment (1st s)}}{0.050^{***}}$ $[0.015]$ 0.940 \checkmark 624	$ \frac{\text{stage}}{0.057^{***}} \\ [0.013] \\ \hline \\ 0.949 \\ \checkmark \\ \\ 512 \\ \\ $

Table 7: Instrumental variable results

Notes: Instrumental variable estimated coefficients. The second (first) stage is reported in panel A (B). The explanatory variable in panel A is the interaction between the average Forza Italia vote share at the national elections of 1994, 1996 and 2001 in mandamento *i* and a dummy equal to 1 if Berlusconi formed a government during legislature *t*. The dependent variable is Relative destinations, which are the relative destinations occurred during legislature *t*. The instrumental variable is the interaction between the drop in Christian Democrats vote share between the national elections of 1979 and 1987 in mandamento *i* and a dummy equal to 1 if Berlusconi formed a government during legislature *t*. The explanatory and instrumental variables of panel A are respectively the dependent and independent variables in Panel B, which reports the first stage results. Columns 1 and 4 include all Sicilian mandamenti. Columns 2 and 5 (3 and 6) include only the ones under (not under) the control of the mafia. Columns 1-3 (4-6) employ legislature (province times legislature) fixed effects. The period of reference is between 1994 and 2022. *** p<0.01, ** p<0.05, * p<0.1

evidence further reinforces the interpretation that the reductions in relative destinations were not incidental, but rather part of a broader political agreement involving reciprocal electoral support and policy concessions.

If vote-buying capacity influences relative destinations through actual vote buying, we should observe larger reductions in assets reallocations when mafia electoral support is particularly valuable—that is, during periods of intense electoral competition. Following the approach proposed by De Feo and De Luca (2017), we gathered data on the vote shares difference between the two main parties of the Second Republic- namely Forza Italia and the *Partito Democratico della Sinistra* (PDS)- in the remaining 19 regions of Italy. In Table 8, we regress relative destinations on the interaction between electoral competition and the DC share drop between 1979 and 1987. The time period is limited to 1994-2017 because at the national elections of 2018 and 2022 Forza Italia was not the leader party of the centre-right coalition anymore. Reassuringly, we estimate a negative and statistically significant coefficient when restricting the analysis to the legislatures in which Berlusconi formed a government (column 1), but we fail to find a statistically significant coefficient in the remaining ones (column 2). Coherently with our theoretical model, we also find a different result relative to De Feo and De Luca (2017). Specifically,

	Rel. Des	tinations	Sh. Forza Italia	Rel. Des	tinations	Sh. Forza Italia
	(1)	(2)	(3)	(4)	(5)	(6)
	Berlusconi	Centre-left	Full sample	Berlusconi	Centre-left	Full sample
Drop DC (1979-87) \times Elect. competition	-0.207** [0.088]	-0.787 [.603]	-0.014*** [0.042]	-0.160* [0.085]	-0.817 [0.654]	-0.013*** [0.048]
Mandamento FE	\checkmark	√	\checkmark	\checkmark	√	\checkmark
Legislature FE	\checkmark	\checkmark	\checkmark			
Province \times Election FE				\checkmark	\checkmark	\checkmark
Observations	426	426	933	426	426	933
R-squared	0.033	0.146	0.778	0.179	0.241	0.818
Number of mandamento	142	142	157	142	142	157

Table 8: Reduced form- Electoral competition

Notes: Reduced form estimated coefficients. The explanatory variable is the interaction between the drop in Christian Democrats vote share between the national elections of 1979 and 1987 in mandamento i and the difference between PDS and Forza Italia vote share at the national elections of year t in the remaining 19 Italian regions (i.e., excluding Sicily). In columns 1-2 and 4-5, the dependent variable is Relative destinations, which are the relative destinations of real estates occurred during legislature t. In columns 3 and 6, the dependent variable is Forza Italia's vote share at the national elections of year t. Columns 1 and 4 (2 and 5) include only legislatures where Berlusconi formed (did not form) a government. Columns 3 and 6 include all legislatures. Columns 1-3 (4-6) employ legislature (judicial district times legislature) fixed effects. The period of reference is between 1994 and 2017. *** p<0.01, ** p<0.05, * p<0.1

harsher electoral competition does not translates into higher vote shares for Forza Italia in mandamenti with higher vote buying capacity. Rather, the opposite holds. This corroborates out theoretical prediction (necessary for our empirical strategy) that vote buying in the second republic is nearly time-invariant i.e., mafia sells its votes at all national elections (irrespective of the popularity of the PDS) and not only when more needed to clash the communist party as during the Cold War (De Feo and De Luca, 2017).

Finally, we assess whether (i) the reduction in relative destinations was the primary form of compensation for mafia-backed electoral support, and (ii) vote buying represented the mafia's main political strategy to influence assets reallocation.

While we cannot rule out any alternative method of payment *apriori*, the peculiar features of our outcome variable make it a strong potential fit to pay back mafia electoral support. This is because most other anti-mafia policies, such as confiscations and arrests, are primarily issued at the local level by the judicial authority. While the political impulse of the government is clearly not zero, it is surely negligible compared to the autonomous power of prosecutors. A similar argument leads us to claim that public procurement advantages, while surely important especially during the First Republic (De Feo and De Luca, 2017), are likely less crucial than a decrease in the intensity of economic response to mafias. This is because the former are mostly issued at the local level (e.g., by majors), while the latter require the backed party to win the national elections and form a government. A relevant question is whether the reward could be represented by the remaining anti-mafia policies issued at the central level. Reassuringly, Table 9 shows that the other main anti-mafia policy (partly but not entirely) issued at the central

	Municip	palities dissolution	Relative Destinations - Properties	Mafia 1	nurders	Relative Destinations - Properties
	(1)	(2)	(3)	(4)	(5)	(6)
Drop DC (1979-87) \times Berlusconi government	0.002			0.006		
Share FI (1994-2001) \times Berlusconi Government		0.153			0.365	
Municipalities dissolution		[0.208]	-0.045		[0.404]	
Mafia murders			[0.058]			0.021 [0.038]
Mandamento FF		.(4			4
Judicial district \times Election FE	v J	v	v v	`	v	v v
Observations	1256	1247	1136	1256	1247	1136
R-squared	0.206	0.208	0.312	0.390	0.392	0.311
Number of mandamento	157	157	142	157	157	142

Table 9: OLS results- Alternative lobbying strategies

Notes: OLS estimated coefficients. The explanatory variable in columns 1 and 4 is the interaction between the drop in Christian Democrats vote share between the national elections of 1979 and 1987 in mandamento i and a dummy equal to 1 if Berlusconi formed a government during legislature t. The explanatory variable in columns 2 and 5 is the interaction between the average Forza Italia vote share at the national elections of 1994, 1996 and 2001 in mandamento i and a dummy equal to 1 if Berlusconi formed a government during legislature t. The explanatory variable in column 3 is a dummy equal to 1 if at least one municipality within mandamento i has been dissolved for mafia penetration during legislature t, while in column 6 it is a dummy equal to 1 if at least a mafia-related murder occurred in mandamento i during legislature t. In columns 1-2 and 4-5, the dependent variable is respectively the above-mentioned dummy for municipalities dissolution and mafia-related murders. In columns 3 and 6 the dependent variable is Relative destinations, which are the relative destinations occurred during legislature t. The period of reference is between 1994 and 2022. *** p<0.01, ** p<0.05, * p<0.1.

level, namely municipality dissolutions for mafia penetration (Di Cataldo and Mastrorocco, 2022), is not significantly related to neither vote buying capacity (column 1) nor actual vote shares of Forza Italia during Berlusconi's governments (column 2).

Relatedly, a non trivial question is whether relative destinations went down during Berlusconi's government due to other lobbying strategies different from vote buying i.e., the *plata o plomo* logic (Dal Bó et al., 2006). While it is difficult to disentangle the potentially conflicting effects of variations in corruption and emersion of corruption, previous research has shown that municipalities dissolutions lead to an immediate reduction in the intensity of corruption (Di Cataldo and Mastrorocco, 2022; Buonanno et al., 2024) in terms of increases in the quality of politicians and social capital. Reassuringly, column 3 shows that variations in municipality dissolutions do not explain relative destinations, either.

As for violence, we show that, during Berlusconi's government, there are no significant relations between vote buying capacity (column 4) and vote shares for Forza Italia (column 5) and mafia-related homicides. Similarly, we find that variations in mafia-related homicides are not associated with variations in relative destinations¹⁵.

¹⁵All regressions include mandamento and judicial district times legislature fixed effects. However, results are unaffected when using a less demanding battery of fixed effects (available upon request).

5 Conclusions

This paper provides causal evidence of mafia vote buying and its economic rewards, highlighting the misallocation of confiscated mafia assets as a form of political compensation. By combining a theoretical model with two complementary empirical strategies, we demonstrate that mafia electoral support is exchanged for political concessions that weaken anti-mafia policies, particularly in periods of heightened electoral competition. Our results suggest that Forza Italia's electoral success in mafia-influenced municipalities correlates with a systematic decline in the allocation of confiscated assets during Berlusconi-led governments.

Using a Regression Discontinuity Design (RDD), we show that municipalities narrowly won by Forza Italia experienced a lower reallocation of confiscated assets, particularly where mafia control was historically strong. Moreover, by exploiting the sharp decline in Christian Democratic (DC) votes following the mafia's withdrawal of electoral support in 1987, we construct a proxy for historical vote-buying capacity and find that areas with a greater vote-shifting ability saw more pronounced reductions in assets reallocation when Berlusconi was in power.

Our findings carry significant implications for the study of organized crime, political economy, and governance. They suggest that mafia vote buying is not only a local phenomenon but extends to the national level, influencing the implementation of key anti-mafia policies. Furthermore, the results highlight how electoral incentives can distort policy enforcement, weakening the intended punitive effects of assets confiscation.

In conclusion, our study sheds light on a critical yet often overlooked aspect of the mafia's relationship with political power: electoral collusion is not just about delivering votes, but also about shaping policy outcomes that allow criminal organizations to maintain their economic and territorial control. Addressing this challenge requires a combination of legal, institutional, and political reforms to insulate anti-mafia efforts from electoral bargaining and ensure that assets confiscation truly serves its intended purpose.

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Appendix

A District Contributions

We offer a further piece of evidence on the majoritarian setting. Our logic is that municipalities contributing more to the victory of an electoral district, given vote buying, should reward Mafia in terms of lower economic response. To assess this possibility, we estimate though OLS the following model:

$$RelDestinations_{i,t} = \alpha_1 Share FI_{i,t} + \alpha_2 ContributionDistrict_{i,t} + \Theta_{i,t} + \epsilon_{i,t}$$
(23)

Where:

- $RelDestinations_{i,t}$ are the relative destinations in municipality i after the elections at time t
- $ShareFI_{i,t}$ is the absolute number of votes that municipality i gave to the Forza Italia candidate at elections at time t
- $ContributionDistrict_{i,t}$ is the share of votes given to Forza Italia in municipality i with respect to all votes collected by the party at elections t in the municipality's district
- Θ is a set of Fixed Effects, namely municipality, electoral district, legislature, and electoral district times legislature Fixed Effects

In this empirical framework, we should see that the more a municipality contributes to the total votes received by a Forza Italia candidate within the district, the more the economic response to mafia should soften¹⁶. In other words, the coefficient α_2 should have a negative sign. Table A.1 presents the estimated coefficients for equation (23), for the full sample and Mafia and non-Mafia municipalities.

¹⁶It is important to keep in mind that we are looking at results at parity of total votes, within the same district and year.

	Full Sample	Mafia	No Mafia
VARIABLES	Rel.Destinations	Rel.Destinations	Rel.Destinations
Tot.Votes FI	0.024*	0.025	0.025
	[0.012]	[0.022]	[0.017]
District Contibution $(\%)$	-0.011***	-0.013**	-0.005
	[0.004]	[0.006]	[0.005]
Observations	1,319	588	731
R-squared	0.245	0.390	0.362
Number of municipalities	270	118	152
Municipality FE	\checkmark	\checkmark	\checkmark
District \times Year FE	\checkmark	\checkmark	\checkmark

Table A.1: Contribution to district and Relative Destinations

Notes: Robust standard errors in brackets are clustered at the municipality level. OLS Regressions with Relative Destinations as outcome variable, and district contribution as major explanatory variable. The first columns considers all Sicilian municipalities' electoral outcomes under majoritarian elections in the period 1994-2022. The second column considers only Mafia municipalities, the third column only non-Mafia municipalities. *** p<0.01, ** p<0.05, * p<0.1

As we can observe from Table A.1, the more a municipality contributed to a Forza Italia candidate within the same electoral district and at parity of total votes given and municipality's characteristics, the lower the Relative Destinations within that municipality in the following years. This effect is significant for the full sample and the Mafia-only sample, while it is not significant, and with a lower coefficient's size, for non-Mafia municipalities. Thus, also this evidence reinforces the idea that vote-buying was rewarded with lower relative destinations during the years with majoritarian system.

B Relative Destinations on Share Forza Italia - OLS

The OLS estimations of equation (22) are reported in Table B.1

Similarly to Table 6, the first (last) three regressions employ mandamento and legislature (judicial district times legislature) fixed effects, respectively on: (i) the full sample; (ii) the mandamenti plagued by mafia; (iii) the mandamenti not plagued by mafia. Reassuringly, we estimate a negative and statistically significant γ only in cases (i) and (ii), while failing to find statistically different from zero coefficients in the sub-sample of non mafia mandamenti.

	Relative Destinations - Properties					
	(1)	(2)	(3)	(4)	(5)	(6)
	Full sample	Mafia	No Mafia	Full sample	Mafia	No Mafia
Share FI (1994-2001) \times Berlusconi Government	012*** [.003]	-0.018*** [0.006]	-0.006 [0.008]	-0.015^{***} [0.005]	-0.021*** [0.006]	-0.009 [0.007]
Mandamento FE	\checkmark	\checkmark	\checkmark	✓	\checkmark	\checkmark
Legislature FE	\checkmark	\checkmark	\checkmark			
Judicial District \times Election FE				\checkmark	\checkmark	\checkmark
Observations	1,136	624	512	1,136	624	512
R-squared	0.091	0.129	0.079	0.318	0.437	0.464
Number of mandamento	142	78	64	142	78	64

Table B.1: (OLS	results
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Notes: OLS estimated coefficients. The explanatory variable is the interaction between the average Forza Italia vote share at the national elections of 1994, 1996 and 2001 in mandamento i and a dummy equal to 1 if Berlusconi formed a government during legislature t. The dependent variable is Relative destinations, which are the relative destinations occurred during legislature t. Columns 1 and 4 include all Sicilian mandamenti. Columns 2 and 5 (3 and 6) include only the ones under (not under) the control of the mafia. Columns 1-3 (4-6) employ legislature (judicial district times legislature) fixed effects. The period of reference is between 1994 and 2022. *** p<0.01, ** p<0.05, * p<0.1

C Alternative measures of Forza Italia consensus

Here, we replicate the most demanding regressions of Table B.1 employing the (time variable) vote share of Forza Italia and the (time invariant) vote share at the elections of 1994 as alternative explanatory variables (interacted with Berlusconi government). Results are shown in Table C.1.

	Relative Destinations - Properties							
	(1)	(2)	(3)	(4)	(5)	(6)		
	Full sample	Mafia	No Mafia	Full sample	Mafia	No Mafia		
Share FI 1994 \times Berlusconi government	-0.012*** [0.038]	-0.017*** [0.055]	-0.055 [0.056]					
Share FI				-0.003	0.013	-0.012		
				[0.005]	[0.008]	[0.007]		
Share FI \times Berlusconi government				-0.009* [0.005]	-0.024*** [0.008]	0.004 [0.006]		
Mandamento FE	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
J. District \times Election FE	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Observations	1,120	624	496	1,127	624	503		
R-squared	0.319	0.434	0.470	0.316	0.441	0.474		
Number of mandamentos	140	78	62	142	78	64		

Table C.1: OLS results- alternative measures of Forza Italia consensus

Notes: OLS estimated coefficients. The explanatory variable in columns 1-3 is the interaction between Forza Italia vote share at the national elections of 1994 in mandamento i and a dummy equal to 1 if Berlusconi formed a government during legislature t. The explanatory variables in columns 4-6 are Forza Italia vote share in mandamento i at the national elections of year t and its interaction with the above-mentioned dummy for Berlusconi's government. The dependent variable is Relative destinations, which are the relative destinations occurred during legislature t. Columns 1 and 4 include all Sicilian mandamenti. Columns 2 and 5 (3 and 6) include only the ones under (not under) the control of the mafia. The period of reference is between 1994 and 2022. *** p<0.01, ** p<0.05, * p<0.1

D Andreotti Trial, 1993 - Testimony of Mafia turncoat Baldassare Di Maggio (from the Prosecution's Case)

PARAGRAPH 6 THE STATEMENTS OF BALDASSARE DI MAGGIO

The evidence gathered against the defendant will find further confirmation in the statements that will be made, in this trial, by Baldassare DI MAGGIO, the "Corleonese" collaborator who played a decisive role in the capture of Salvatore RIINA, carried out by the Carabinieri of the R.O.S. on January 15, 1993; specifically, in relation to:

- Cosa Nostra's decision to send a **warning** to the Christian Democracy (D.C.) during the national political elections of 1987;
- The strategy pursued by the organization to influence the **maxi-trial**, through a network consisting of Ignazio SALVO, the Hon. LIMA, and Senator Giulio ANDREOTTI.

With regard to the first point, through DI MAGGIO's testimony and related corroborations, the Prosecution will demonstrate that the leaders of Cosa Nostra decided on the course of action to take during the 1987 political elections in a meeting attended – among others – by DI MAGGIO himself, Salvatore RIINA, Antonino MADONIA, and Salvatore CANCEMI.

The meeting had been convened by RIINA to determine whether Cosa Nostra's votes should be directed towards the D.C. or rather towards the Italian Socialist Party (P.S.I.), as the Christian Democrats *"were not doing their job."*

Indeed, RIINA complained that the D.C. was not assisting the organization concerning the progress of the **maxi-trial**.

The meeting concluded with the decision to vote for the P.S.I. and, in particular, for Hon. MARTELLI, not because the latter had any ties with Cosa Nostra, but to *"send a slap"* to the D.C.

However, following a remark by Antonino MADONIA in this regard, it was allowed to continue voting for certain Christian Democratic candidates, as long as they were *"friends"* and still willing to assist the families with whom they had connections.

E Additional Figures



Figure E.1: McCrary test - Mafia Municipalities

Notes: McCrary test for significant difference in the density of the electoral margin above and below the cutoff. The municipalities taken into consideration are all the Sicilian municipalities, with their electoral outcomes for majoritarian elections between 1994 and 2022.





Notes: McCrary test for significant difference in the density of the electoral margin above and below the cutoff. The municipalities taken into consideration are all the Sicilian municipalities, with their electoral outcomes for majoritarian elections between 1994 and 2022.





Notes: Regression Discontinuity fitted lines. The running variable is the Electoral margin, the vote difference between a Forza Italia candidate and the main competitor at national elections under the majoritarian system. The dependent variable is Relative destinations in the years after the election of reference. All Sicilian municipalities are included, the period of reference is between 1994 and 2022.

E.1 DC vote drop 1979-1987





Figure E.5: Official Records

Camera 03/06/1979 Area ITALIA Circoscrizione PALERMO-TRAPANI-AGRIGENTO-CALTANISSETTA

Liste/Gruppi	Voti	%	Seggi
DC	594.739	45,24	12
PCI	267.975	20,38	5
PSI	131.567	10,01	З

Camera 14/06/1987 Area ITALIA Circoscrizione PALERMO-TRAPANI-AGRIGENTO-CALTANISSETTA

Liste/Gruppi	Voti	%	Seggi
DC	542.936	39,12	11
PCI	276.320	19,91	5
PSI	214.625	15,46	4